

# SPEOS

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## **DTH™ 3** **Minimum Profile** **Enclosure**

### **SPECIFICATIONS**

**Frequency Response, 1 meter on-axis, swept sine in anechoic environment:**

51 Hz - 16 kHz

**Low Frequency Cut-Off (-3 dB point):**

51 Hz

**Useable Low Frequency Limit (-10 dB point):**

43 Hz

**Power Handling:**

Full Range:

250 W continuous (44.7 V RMS)

500 W program

Biamp Low:

350 W continuous (52.9 V RMS)

700 W program

Biamp Mid/High:

150 W continuous (34.6 V RMS)

300 W program

**Sound Pressure Level, 2.8 V (1 watt) • 1 meter in anechoic environment:**

97 dB

**Maximum Sound Pressure Level:**

120 dB

**Radiation Angle Measure at -6 dB Point of Polar Response:**

500 - 1,600 Hz:

Horizontal: 98° ±5°

Vertical: 67° ±28°

1.6 - 5 kHz:

Horizontal: 71° ±24°

Vertical: 65° ±26°

5 - 16 kHz:

Horizontal: 73° ±19°

Vertical: 49° ±13°

**Directivity Factor, Q (Mean):**

10.00 (±6.94)

**Directivity Index, D<sub>i</sub> (Mean)**

9.01 dB (±3.13 dB)

**Transducer Complement:**

One 1505-8 DT Black Widow®

One 6.5" high power midrange driver

One HT-94 tweeter

**Box Tuning Frequency:**

50 Hz

**Crossover Frequency:**

1.2 kHz and 5 kHz

**Impedance, Z:**

8 ohms nominal

5.7 ohms minimum

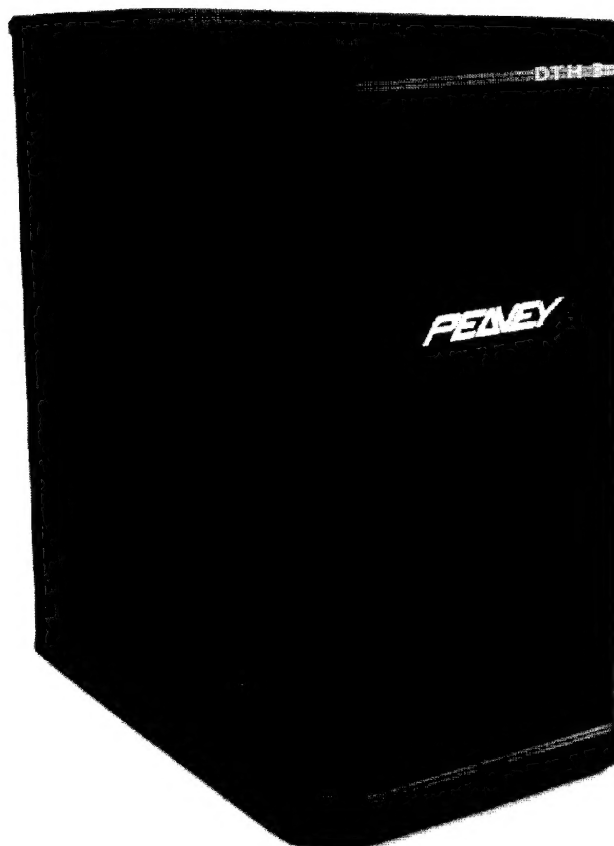
**Input Connections:**

Two internally paralleled

Neutrik® 4 conductor

Speakon® (NL4MP)

Neutrik® and Speakon® are registered trademarks of Neutrik AG



**PEAVEY®**

#### Enclosure Materials & Finish:

3/4" plywood with battleship grey carpet and plasticized metal grille

#### Dimensions (H x W x D):

32 1/4" x 18 3/4" x 30 1/4"  
(81.9 cm x 47.6 cm x 76.8 cm)

#### Net Weight:

107 lbs. (48.6 kg)

#### FEATURES

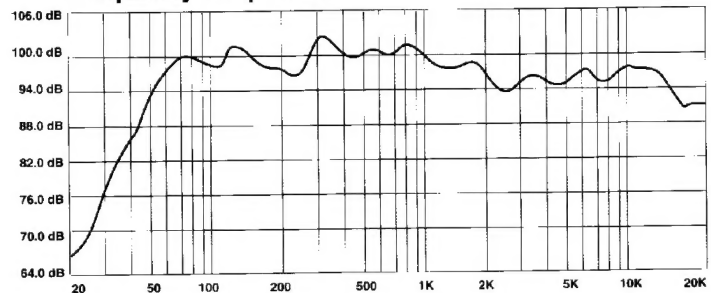
- Full-range/biamp operation
- 1505-8 DT woofer
- High power handling polypropylene capacitors
- 16-gauge plasticized metal grille
- Interlocking top/bottom for stackability

#### DESCRIPTION

The new DTH™ 3 was designed as a true minimum profile enclosure. It measures only 18 3/4" at its widest point up front, while tapering to a mere 9" at the back. Because of the trapezoidal geometry of these enclosures, building arrays is much easier. This shape also greatly reduces standing wave build-up within the enclosure. The DTH-3 is a three-way system using a 1505-8 DT woofer, a 6 1/2" high power midrange driver and an HT-94 circumferential ring tweeter. This unit is easily transformed into a biampable enclosure by removing the top and moving a couple of jumpers on the crossover circuit board. High power handling polypropylene capacitors are used on this crossover. This results in a cleaner sound, especially at high power levels, as well as improved reliability. Recessed areas have been provided on the top that coincide with the placement of the feet on the bottom. This allows integral stacking of enclosures. Two internally paralleled Neutrik® 4 conductor Speakon® connectors are provided for input to the speaker. A 1/4" phone jack is also provided for full range input purposes. (This input should not be used for high power operation). A Battleship Grey velour carpet covers the DTH 3. This is a low-wear, high abrasion-resistant carpet, similar to those used in the automotive industry. A heavy-duty 16-gauge metal grille dresses off the enclosure and provides superior protection for the drivers. This grille has been specially coated with a plasticized paint. This aids greatly in damping grille vibrations at high sound pressure levels.

#### Frequency Response

Fig. 1



#### Impedance

Fig. 2

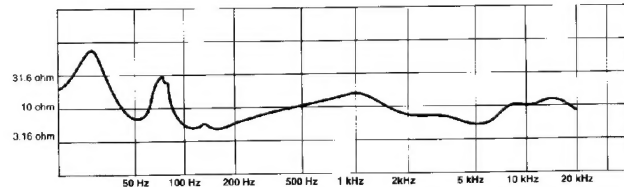


Fig. 3

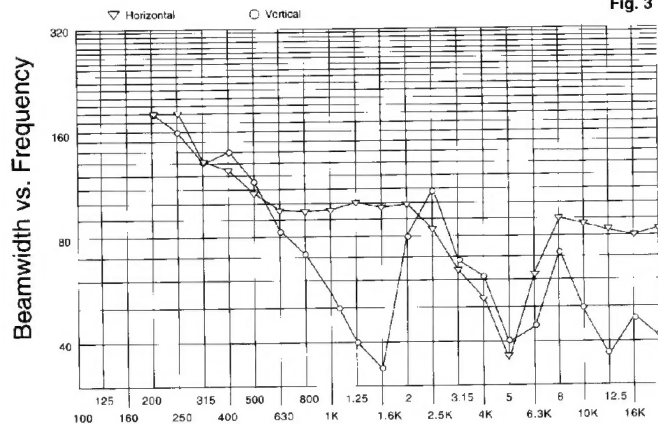
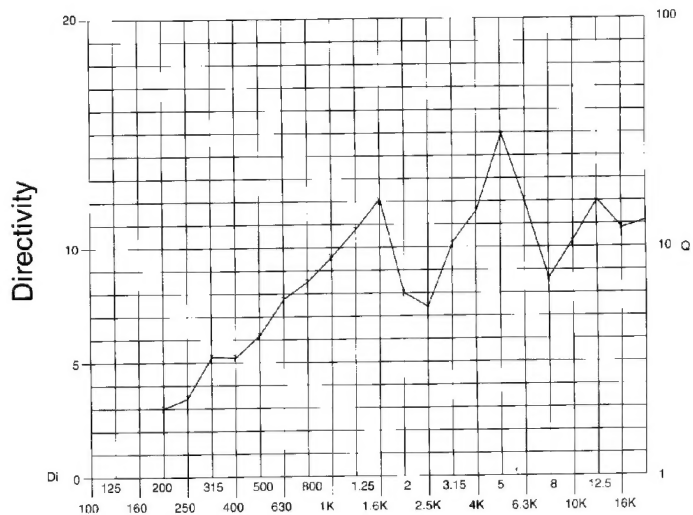
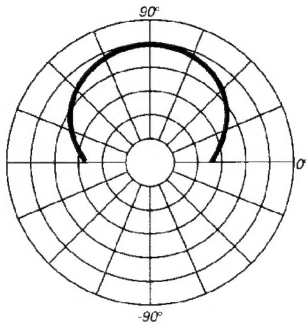


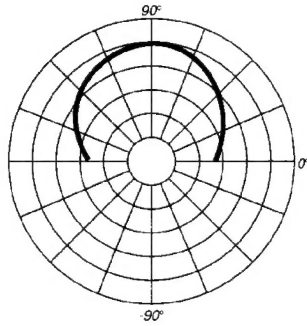
Fig. 4



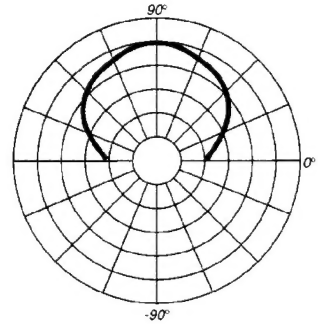
# **HORIZONTAL POLAR PATTERNS** 6 dB per division



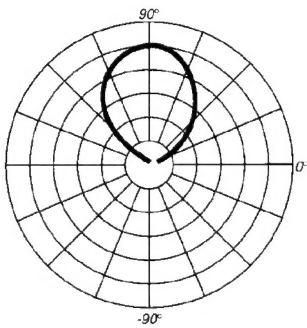
500 k



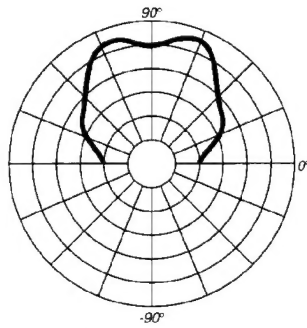
1 k



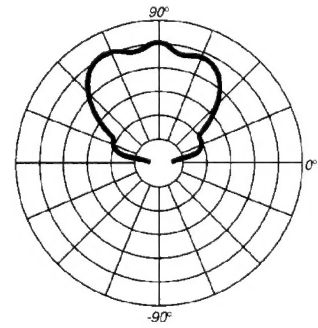
2 k



4 k

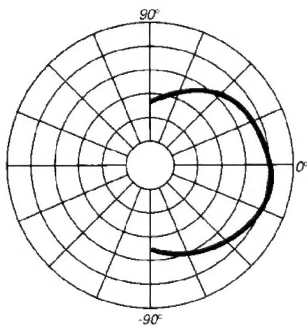


8 k

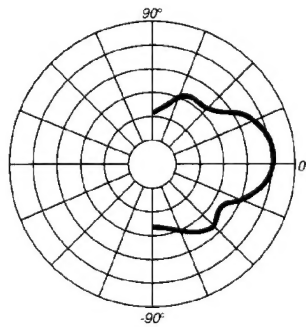


16 k

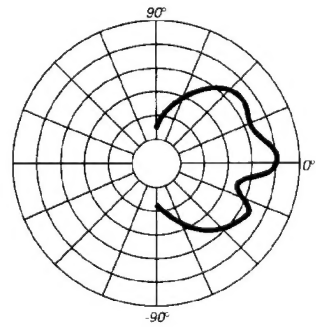
# **VERTICAL POLAR PATTERNS** 6 dB per division



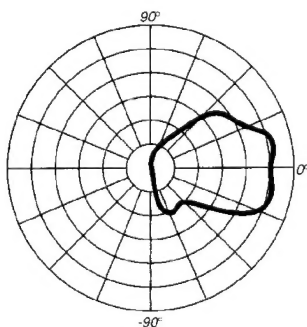
500 Hz



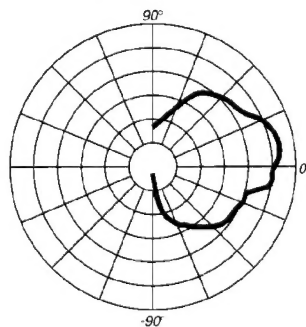
1 K



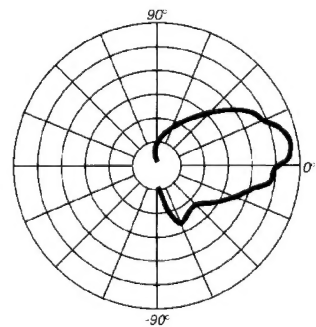
2 K



4 k



8 k



16 k

All this combines to give you a great looking and great sounding loudspeaker perfectly suited to any sound reinforcement application.

### DIRECTIVITY

Beamwidth and directivity factors are derived from the -6 dB points from the polar plots which are measured in a whole space anechoic environment. These are specifications which provide a reference to the coverage characteristics of the enclosure. These parameters provide insight for proper enclosure placement and installation in the chosen environment. The blending of the components of the DTH™ 3 exhibits a desirable beamwidth and directivity factor (figure 3 and 4) suitable for all high-level sound reinforcement applications.

### FREQUENCY RESPONSE

This measurement is useful in determining how accurately a given enclosure reproduces an input signal. The frequency response of the DTH™ 3 is measured at 1 meter using a 2.8 volt swept sine input. As shown in Figure 1,

the selected drivers in the DTH 3 combine to give a smooth frequency response from 51 Hz to 16 kHz.

### POWER HANDLING

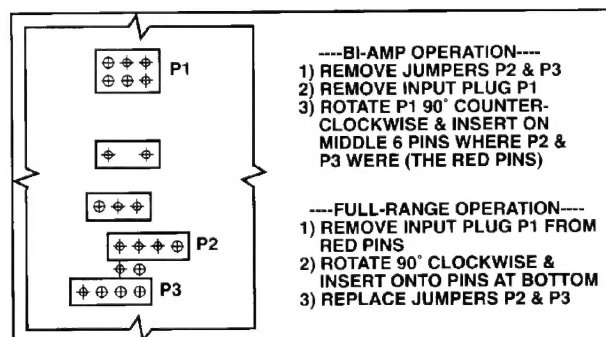
There are many different approaches to power handling ratings. Peavey rates this speaker system's power handling using a modified form of the AES Standard 2-1984. Utilizing audio band (20 Hz - 20 kHz) pink noise with peaks over four times the RMS level, this strenuous test signal assures the user that every portion of this system can withstand today's high-technology music. The test signal contains large amounts of very low frequency energy, effectively simulating the frequency content of live music situations. The full measure of high frequencies in the test signal allow for exposure of the speaker system to synthesized tone that may extend beyond audibility. This rating is contingent on having a minimum 3 dB of amplifier headroom available.

### ARCHITECTURAL & ENGINEERING SPECIFICATIONS

The loudspeaker system shall have an operating bandwidth of 51 Hz to 16 kHz. The output level shall be 97 dB when measured at a distance of one meter with an input of one watt. The nominal impedance shall be 8 ohms. The continuous power handling shall be 250 watts, maximum program power of 500 watts, with a minimum amplifier headroom of 3 dB. The nominal radiation geometry shall be 80 degrees in the horizontal plane and 60 degrees in the vertical plane. The outside dimensions shall be 32 1/4 inches high by 18 3/4 inches wide by 30 1/4 inches deep. The weight shall be 107 lbs. The loudspeaker system shall be a Peavey model DTH™ 3.

### ONE YEAR LIMITED WARRANTY

**NOTE:** For details, refer to the warranty statement. Copies of this statement may be obtained by contacting Peavey Electronics Corporation, P.O. Box 2898, Meridian, Mississippi 39302-2898.



# PEAVEY®

Features and specifications subject to change without notice.

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